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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

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CLEVELAND, O.

The preliminaries are now all arranged for building a handsome club-house at Lake View Park for the Cleveland Yacht Club.

Capt. N. Bartlett, the G. M. W., is found daily luffing around the vessel owners' and brokers' offices. He says he will be in it during World's Fair time.

Capt. D. G. Gelson, an old retired mariner living on the West Side, passed away on Saturday night last, at the age of 68 years. He was widely known and respected.

The Veteran Seamen's Benevolent Association desire to express their thanks for donations, in aid of their work, from Mr. M. A. Bradley, Capt. George Stone, The Cleveland Shipbuilding Co., Chaplain Jones, THE MARINE RECORD, and donors of small amount.

Instead of being a protection to shipping there is danger of the west arm of the outer harbor being transformed into the outer flats. Yachtsmen, who carried eight feet of water at their moorings formerly, now report that there is but four feet, and they are required to move out.

The weather report for April shows the mean temperature to have been 45.8°, the highest 78° on the 5th., and the lowest 25° on the 9th. The prevailing direction of the wind was northwesterly, and its maximum velocity 36 miles an hour on the 5th. The total precipitation of rain was 2.02 inches. There were thunderstorms on the 3rd and 4th., and lunar halos on the 7th.

Mr. John Corrigan has just gained a victory over a long pending case of taxation of vessel property. Mr. Corrigan claimed that he purchased the Adams and a seven-eighths interest in the David Dows of the Ohio Central Barge and Coal Co., of Toledo, and immediately conveyed them back to the company, taking a chattel mortgage for \$90,000. He set up a claim that his interest was only equitable, and that he can be taxed only for that interest. Judge Nobles's decision made the injunction against collecting the tax perpetual.

A small army of workmen are engaged on the valuable property and wharfage recently purchased by the D. & C. line, between the foot of Superior and St. Clair streets. Handsome general offices, waiting rooms, baggage room, and freight sheds, will soon occupy the site

of the old time structures, and about 600 feet of new dockage will take the place of the present decayed wharves. Mr. H. R. Rogers, for a number of years with the company at this port, has resigned and accepted an excellent position as general agent of the Soo Line at Cleveland. The employees of the company have presented Mr. Rogers with some valuable mementos, and general agent, Mr. T. F. Newman, got off one of his pleasant speeches on the occasion. It is safe to say that no employee was ever more appreciated in his business connections than Mr. Rogers, and the general opinion is that he deserves all the good which may come to him.

Capt. E. C. Benham represented the owners on the damage survey of the burned steamer W. P. Thew, held, at Chicago this week. The loss on hull and machinery is \$7,028.98; salvage about \$700. Captain Benham speaks in high terms of the way in which the steamer was handled after the fire started, and gives the master credit for skill and excellent judgment under the trying circumstances. The managing owner of the Thew also speaks in praise of Captain William Patterson, who seems to be justly entitled to recognition from the underwriters. The manager of the salt dock at South Chicago cannot be too severely censured for spreading so untruthful a report regarding the crew of the boat, and the personal pique which he displayed in trying to damage the reputation of both steamer and crew ought to be a fair warning to masters doing business or handling freight at the dock yard where he is employed.

The Cleveland Dry Dock Co. have nearly completed the large fueling scow building for Erie parties, and she will be launched next week. Her dimensions are 160 feet long, 32 feet beam, and 8 feet deep. She will be fitted with twin screws 56 inches in diameter. McKinnon of Ashtabula, has built her engine and boiler. Work on the large new dry dock is now progressing satisfactorily. The company are doing the excavation work, as expected, a vein of quick sand was struck, and it has somewhat delayed construction, but this trouble has now been overcome.

The Globe Iron Works Co. will launch the lighthouse tender Columbine on Saturday at 3 p. m. She is to be stationed at Portland, Ore., and will "wend her way" through the Straits of Magellan to reach there.

IN CHICAGO MARINE CIRCLES.

Special Correspondence to The Marine Record.

Capt. P. W. Egan's son, who has been here several days searching for his missing father, received a dispatch Tuesday from M. A. Bradley, vessel owner, Cleveland, requesting him to come home, as Capt. Egan had been found safe and well at Rochester, N. Y. Vessel men here began to surmise that Capt. Egan had gone in the wake of Capt. Thomas, another of Mr. Bradley's captains, who mysteriously disappeared from Chicago a short time ago.

Gilbert Rosie, aged about 21 years, one of the crew of the schooner Trueman Moss, was lost overboard Monday afternoon about 4 o'clock. The schooner loaded with cedar posts, from Martins Bay, was in tow, with three other schooners, of the tug A. A. Carpenter coming into port between the water works crib and the Government breakwater, when the cry of a man overboard was raised. Capt. Tom Driver, of the Moss, and the captain of the schooner Maggie Dall, which was the last of the tow, immediately had their boats lowered and manned, but the poor young sailor sank before they could rescue him. Rosie was recently from Scotland, where his widowed mother resides. Capt. Driver says he was an excellent lad, and he deeply regrets his sad loss.

At Miller Brothers' shipyard, the steamer Frank Woods was in dock for repairs; the steamer W. P. Thew, for

calking and repairs; the schooner City of Chicago for repairs to damage done by collision with the schooner Butcher Boy; the steamer R. A. Seymour, Jr., for repairs; the steamer Berrien had her topsides calked.

The schooner City of Chicago, lumber laden, arrived here on the 18th. She had been in collision the night of the 17th with the schooner Butcher Boy, which was running down Lake Michigan light, and struck the City of Chicago on the port side, nearly knocking her side in, and causing large damage, her cargo of lumber preventing her from sinking.

The barge office is now open day and night, another inspector having been added to the force there. Vessel captains are very glad of the change.

The U. S. steamer Andy Johnson arrived here last Thursday. Vessel papers are undergoing examination by her officers.

The tug Prinderville sank in the river near Kenzie street bridge, last week. She was pumped out and raised.

The barge Newell Eddy left this port Friday, with the first crew shipped by officer Biemel, of the New Lake Carriers' Association. The barge was grain laden for Buffalo, and was under police protection until she got outside.

The steamer W. P. Thew, recently burnt off South Chicago, was insured for \$13,500 against fire. A survey has been held on her.

The N. M. T. Co.'s steamer Lawrence, bound from Chicago with passengers and merchandise, ran on Racine reef at 3 o'clock on the morning of May 20th. The tugs T. T. Morford and Gillen released her about 10 o'clock, and she proceeded to Milwaukee to go into dock for repairs to her shoe.

The schooner Surprise, loaded with ties, dragged her anchor and went ashore on Carp river Wednesday night. The tug Saugatuck released her after lightening the deck load.

The steamer Lord, of the Vandalia line, broke down in midlake last week, her engine being badly damaged. She was towed to Milwaukee. The steamer Minnie M will take her place.

The schooner Annie M. Peterson left here Saturday night for Milwaukee in tow of the tug Protection. The schooner will receive repairs at the Milwaukee Dry Dock Company's.

The schooner Evaline Bates arrived here Saturday night. She came near sinking at Sturgeon Bay and was pumped out. It was found that a plug had worked out of a hole just below the water line and caused the trouble.

The tug James McGordon just purchased by the Dunham Towing and Wrecking Co., arrived here Sunday evening from Frankfort. She will make another splendid addition to the company's already fine fleet of tugs.

The tug T. T. Morford, of the D. T. & W. Co. arrived at this port Saturday night with 9 schooners in tow which had been picked up by Captain Charley Roach down the lake. WILLIAMS.

BUFFALO, N. Y.

Special Correspondence to The Marine Record.

The grain shovellers' union had a meeting last week at which the following officers were elected: President, W. J. O'Connor; vice-president, Thomas Cavanaugh; treasurer, John McNamara; recording secretary, A. J. Canny; financial secretary, M. J. O'Callahan. A vote of thanks was extended to the retiring president, P. J. McMahon.

The dock laborers in the employ of W. J. Conner's will not gain the proposed union, as Mr. Conner has all the unloading for every railroad dock in the harbor. There will not be a great many in the union.

(Concluded on page nine.)

WORLD'S FAIR NOTES.

According to the Liverpool "Journal of Commerce" the English railways will carry World's Fair exhibits at half rates from any station to the port of embarkation, and most of the Atlantic steamship lines will transport them at a uniform rate of 11s [\$2.67] per ton.

An association has been formed in Germany to organize excursion parties to visit the World's Fair and incidentally Niagara Falls, and a number of the larger cities. It is proposed to accomplish this within a period of sixty days at an expense of between \$250 and \$300.

Visitors to the Exposition will be able to go comfortably and expeditiously from one part of the grounds to another and obtain advantageous views of the buildings. They may do this either in electric boats through the lagoons, or by the intramural elevated electric railway. The contract for the latter has been awarded. There will be five miles of double track and stations at convenient points. The route, as mapped out, runs from one end to the other of the grounds in a sinuous course. The fare will be five cents, and the capacity of the road about 20,000 an hour.

Many relics of the Cabots, the early English voyagers to America, will be exhibited at the Exposition by a committee formed for that purpose in Bristol, England, where the Cabots lived. The Bristol "Times and Mirror," of recent date, states that the committee held a meeting to complete arrangements for collecting the material for the exhibit; that the mayor of the city presided; that there was a very large attendance, representing especially the leading mercantile houses and the various archaeological associations of the city, and that it was apparent from the proceedings that there was available an abundance of relics from which to select a very interesting exhibit.

The reproduction of Columbus' caravel, the Santa Maria, is being built by the Spanish government at Carraca yard at Cadiz. The keel was laid on March 1. The caravel's dimensions are: length at keel, 62 feet 4 inches; length between perpendiculars, 75 feet 5 inches; beam, 22 feet; draught, 14 feet 8 inches. Great care is being taken with details, and the instruments and appliances of the time of Columbus will be in their places aboard the caravel. The Pinta and Nina, it is announced, are being reproduced by American capital, so visitors to the exposition will be able to see the Columbus fleet complete. The Spanish government will provide crews for the three caravels, dressed as were Columbus' sailors, and the trip across the Atlantic will be made under escort of a Spanish man-of-war. After participating in the naval review in New York Harbor the caravels will proceed to Chicago. After the Fair closes they will remain the property of the United States.

Among the many notable features that will lend interest to the marine section of the transportation exhibits, will be seen many new forms of naval design and construction and improved appliances, together with recently adopted devices, which, in not a few instances, may challenge for the first time the attention of ship owners and builders. Among reversible life-boats, one model will show the method of interior ventilation during a gale of wind, also one showing how the boat can be dropped into the sea in the darkest night from a sinking ship with all hands on board, also a model of triangular raft with tent to protect its occupants from exposure, also various other life-boats and rafts of large and small sizes. An interesting and useful device is an automatic ship log and speed indicator which will show in actual operation the speed in miles per hour that a vessel is travelling, by means of a dial and pointer. It will also record automatically on paper the speed and give the day and the hour the bearings are taken. An automatic steam steering apparatus, a spur geared hoisting engine with friction drum, and a frictional geared hoisting engine will be shown all working. To illustrate a marine brake for instantly stopping vessels when under full headway, a waterspace or route in the lake basin is asked for, the steam yacht or boat to carry a large or small number of passengers, charging a small fee for transportation. The exhibit of facilities by the Inman Line of Trans-Atlantic steamers, and of models of the Inman Line illustrating the progress gained in speed of steamships in the past fifty years, also that of the White Star Line in their pavilion fronting the lagoon comprising large-sized models of steamships' exteriors and interiors, have already been made the subject of extensive comment. Occupying wall and floor space will be seen dummy signals, framed sample boards, and signal code arts, the whole forming a complete exhibition of the invention known as the Coston Light Signal, covering the entire development of the same with improvements from 1840 to date. Among materials that enter into naval construction and equipment will be shown complete length battle ship shaftings, army trunnions, jackets for wire-wound guns, armor bolts, caps and washers. Steam-hammers of different sizes will be displayed; also a triple expansion engine requiring twenty feet space, in the rear of which on the wall will be placed various models of iron and steel boats constructed at all lake ports in the past forty years. Interesting varieties of modern naval invention and construction will include marine blowers for ventilating and forced draft, naphtha launches, electric gas engine launches, skiffs, shells or racing gigs, sail and paddle canoes, canvas lined row boats, combination row and sail boats, and single scull shells with rowing appliances complete, weighing in all about twenty-five pounds.

DEMURRAGE, AVERAGE AND LOSS.

Demurrage is a compensation or allowance to be paid by the freighter to the owner of a vessel, in case she is obliged to wait beyond her lay or running days to receive or unload her cargo either before or after the voyage.

The time allowed for demurrage is generally stipulated in the charter party, or bill of lading, but where no time is fixed, but the stipulation is that the freighter shall be allowed the usual and customary time, the period allowed for the lading or discharging of the cargo, regulated according to the custom of the port.

Demurrage is due, though the vessel is detained in the port of lading or delivery by the port regulations or custom house restraints, or the unlawful seizure of the goods by the custom house officers, or the want of any necessary papers which it is the duty of the freighter to provide; it being a general rule that the freighter is liable for damages for all delays arising in the port occasioned by any cause whatever, provided that the vessel is ready to receive or deliver the cargo. But when the condition of the charter party is that the ship shall be unloaded and discharged within the usual and customary time of vessels in the port of delivery and discharge, or within a reasonable time, the freight is not liable for any delay, which may arise from the ordinary course of business in the port or custom house in the place of discharge, whether such delay be occasioned either from the crowded state of the port, or from the routine or ordinary course of business in the bonded warehouse or the port or custom house of the place of discharge.

If a chartered vessel is detained beyond her days of demurrage *prima facie* payable for those days is also the measure for compensation for the extended time. But it is open for the ship owner to show that more damage has been sustained, and to the freighter that there has been less than would be compensated.

By the usage and customs of merchants the words "days" used alone in a clause of demurrage means working days and not running days; and working days do not comprehend Sundays or custom house days.

Freighters under, or holders of bills of lading, are liable for damage *pro rata*, that is in proportion to their share of the cargo.

GENERAL AVERAGE.

General average signifies the contribution to which the owners of the vessel, goods and freight, become liable one to another on the sacrifice of a part of the vessel or cargo, for the preservation of the whole, in a case of general danger. The principles of general average ought to be examined in a work on insurance because the underwriters are liable to pay the insured the proportion of the contribution assessed upon the amount insured, in cases where the loss is occasioned by some peril insured against.

To contribute a claim to general average there must be voluntary and premeditated sacrifice of part for the preservation of the whole, in which case, all who are benefited by the sacrifice must contribute to the loss in proportion to these several interests. The ordinary instances of this species of sacrifice are the throwing overboard of part of the cargo, or the ship's stores, the cutting away of the ship's masts, cables, boats or rigging, or other designed and voluntary sacrifice. The sacrifice must be voluntary, and made on an occasion of imminent danger. It must not be the result of a panic, terror, but an act of prudence to avoid a real danger; it is not indeed necessary, for prudence generally will not permit, that the master should wait till the last extremity. The most usual foundation of general average is the case of jettison when goods are thrown overboard to lighten the ship, which may be necessary in a case of storm or has accidentally run aground etc.

Where jettison is made for the purpose of preventing an approaching danger and there is time to deliberate whether the jettison ought to be made, in what manner, and of what things it is best for the captain to take advice of the other officers, and perhaps the crew. Of course this cannot be done where the danger is imminent and requiring immediate action.

OF TOTAL LOSSES AND ABANDONMENT.

Losses are of two kinds, total and partial. The insured may recover as for a total loss, not only when there has been an absolute destruction of the thing insured, but when by the happening of any of the misfortunes or perils insured against, the voyage is lost or not worth pursuing, and the projected adventure is frustrated; or, when the thing insured is so changed and spoiled as to be of little or no value to the owner, or, when the salvage is very high; or, when further expense is necessary and the insurer will not undertake to pay the expense.

But in such cases, where any part of the property remains, the insured, in order to be entitled to a claim upon the insurance company for a total loss, must, in the first place abandon, that is, he must renounce and yield up the insurers all his right, title and claim to what may be saved, and leave it to them to make the most of it for their own benefit. The insurer then stands in the place of the insured, and becomes legally entitled to all that can be rescued from destruction. The object, therefore, of an abandonment is to turn that into a total loss which otherwise would not be; for the very idea of abandonment presupposes a constructive total loss merely, and implies that something remains which may be saved, and which may be given up, or abandoned to the insurers.

The Pacific Coast Marine Record, in a recent issue, treats

the point of abandonment or total loss, in the following pertinent manner:

"The law recognizes an actual and a constructive total loss. An actual total loss being the absolute destruction of the property requires no notice of abandonment, for there is nothing to abandon; but a constructive total loss takes place when the property is so damaged or situated that its recovery is very doubtful, or the expense of the recovery is too great to warrant the attempt. The effect of an abandonment is to convert what would otherwise be a partial loss into a claim for total loss, and a cession to the underwriter of all rights of ownership to the property so abandoned. Notice of abandonment must be made in good season, and should be made as soon as the preliminary proofs are in, or sufficient data regarding the loss showing that an abandonment is justifiable are at hand. The justice of this is obvious; for should the abandonment be accepted, the underwriter becomes owner of the property and should have the same chances as the original owner to save as much as possible. If the abandonment be not accepted the owner must, by the terms of his insurance contract do all in his power to preserve and save the property, and if the ultimate result shows that the abandonment was justifiable the original notice holds good and the abandonment stands.

By the law of the United States in order to justify an abandonment the property must be damaged to at least one-half its value. The question of the amount of damage is determined by the terms of the insurance policy. For example on a vessel insured under the ordinary American form of policy the usual deductions provided for, viz: one-third new for old, and the usual deductions made on the caulking and metaling must be made from the gross cost of repairs, and the net result obtained must amount to at least half the value as expressed in the policy. On cargo the same general rule holds good, but each case must be considered with reference to the terms of the insurance policy.

By accepting the abandonment the underwriter becomes owner of the property insured; but if subsequent events show that the acceptance was obtained by mis-statements or fraud, it is void. The abandonment whenever accepted refers back to the time of the loss, and expenses which may have been incurred for the preservation of the property fall upon the underwriter. If the abandonment is not made in good season the loss is settled on the principle of partial loss only, even though the result shows that an abandonment would have been justified.

MIRACULOUS ESCAPE FROM A WATERY GRAVE.

Andrew Hanson, a seaman on the schooner H. Taber, had a miraculous escape from drowning on Lake Michigan after being adrift on a raft of cedar ties for forty hours.

Hanson was one of the crew of the H. Taber, bound for Chicago from Cheboygan, Mich. Last Thursday night when fifteen miles off Milwaukee the Taber was struck by a squall and went over on her beam ends. She lost her deckload of cedar ties, and with it Hanson went into the lake. At 3 o'clock Saturday afternoon he was picked up by the schooner Newland twenty five miles northeast of Racine. His arms and legs are badly swollen from his long exposure to the chilly waves of Lake Michigan.

The schooner H. Taber on her arrival in Chicago reported the loss of Hansen overboard, with a large portion of the vessel's deck load. Two of the men had been washed overboard. It was blowing hard at the time, and the Taber was being roughly handled, but she was soon brought to, and the boat lowered with two men in it. The boat rolled around among the floating ties, which had been scattered by this time until they covered an area of more than a mile. Olaf Peterson was found floating with a tie under each arm, and was dragged into the boat. He was overcome with freezing water and the biting winds, and was about to let go his hold and give up the struggle when one of his shipmates grasped him by the hair.

The boat's crew imagined they heard Hansen calling, and rowed a long distance in the direction from which the voice seemed to come, but they found nothing more than floating ties. Again one of the men insisted that he heard a voice in an opposite direction, and the boat was pulled a long distance but with no better success.

After cruising about for some time, listening for the faintest cry or groan, the boat was pulled back to the schooner. The captain and all hands agreed that Hansen had been stunned or crushed by the ties when he was swept overboard, and had immediately sunk. When the vessel arrived in port the master reported Hansen as lost overboard and drowned, which was a reasonable conclusion to arrive at under the circumstances.

Hansen's escape from death has seldom been equalled on the lakes. He is warm in his praise of Captain C. C. Nalid, of the schooner Newland, which finally came to his rescue.

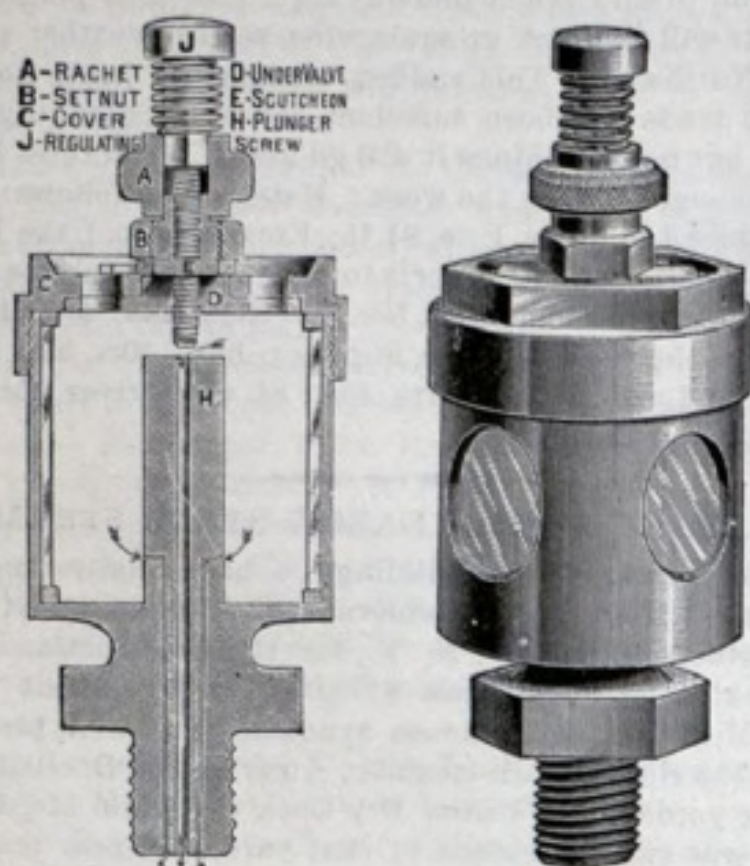
A bill has been introduced in the House by Mr. Dalzel providing for a survey of a route for a ship canal to connect the waters of Lake Erie and the Ohio river in the neighborhood of Pittsburg. Ten thousand dollars has been recommended as an appropriation for the survey, the original amount asked for being \$40,000. It is said that the present needs of the iron-producing trade demand a shorter and cheaper transportation route.

The schooner Bavaria, which went ashore near Goderich, Ont., last fall, has been floated, and is now in Goderich harbor, the hull apparently in fair condition.

DOUBLE FEED "SAFETY" CRANK PIN OILER.

The objection to many of the wrist pin oilers now on the market is that there is only one passageway for the oil, which is liable to become clogged up, and as there is nothing but the gravity of the oil to carry it to the bearing, there is danger of the wrist pin not getting oil at all times. The accompanying cut represents a new and novel device in wrist pin oilers, the invention of S. Olin Johnson and W. A. Downs, manager and superintendent of the Penberthy Injector Co. Its name, "Safety," carries with it the claims made for the cup, as there are two distinct feeds, through one of which the oil is forced by means of a plunger, while the other is similar to other flash feed cups.

To open oil filling and vent holes turn ratchet to right without lifting, and the cover being concave, no oil is wasted. To clean, remove screw J by turning ratchet A to left after lifting off the square, and a wire will remove any obstructions.



Referring to the cut, the cup is filled through the oil hole in the cover (which is concave), and is covered by the under valve D and scutcheon E, operated by thumb nut A. It is not necessary to remove the cover except to clean the cut. The feed is regulated by the ratchet A, which is raised and lowered, and allows the plunger to raise at every revolution of the engine to any desired height. The oil is conveyed through the passageway around the exterior of the plunger as well as the center of the same, as indicated by arrows. The ratchet A sits on a square admitting of a regulation of 1-4 of a turn on a spindle 27 threads to the inch. To open oil filling and vent holes turn ratchet to right without lifting, and the cover being concave, no oil is wasted. To clean, remove screw J by turning ratchet A to left after lifting off the square, and a wire will remove all obstructions.

These cups, or particulars regarding them, can be had of the manufacturers, the Penberthy Injector Co., Detroit, Mich.

WHY SIXTY MINUTES MAKE AN HOUR.

Why is the hour divided into sixty minutes, each minute into sixty seconds, etc.? Simply and solely because in Babylon there existed, by the side of the decimal system of nations, another system, the sexagesimal, which counted by sixties, says a writer in the Science Siftings. Why that number should have been chosen is clear enough, but it speaks well for the practical sense of those ancient Babylonian merchants.

There is no number which has so many divisors as 60. The Babylonians divided the sun's daily journey into 24 parasangs or 720 stadia. Each parasang or hour was sub-divided into 60 minutes. A parasang is about a German mile, and the Babylonian astronomers compared the progress made by the sun during one hour at the time of the equinox to the progress made by a good walker during the same time, both accomplishing one parasang.

The whole course of the sun during the 24 equinoctial hours was fixed at 24 parasangs, or 755 stadia, or 360 degrees. This system was handed on to the Greeks, and Hipparchus, the Greek Philosopher, who lived about 150 B. C., introduced the Babylonian hour in Europe.

Ptolemy, who wrote about 150 A. D., whose name still lives in the Ptolemaic system of astronomy, gave still wider currency to the Babylonian way of reckoning time.

It was carried along on the quiet stream of traditional knowledge through the middle ages, and, strange to say, it sailed down safely over the Niagara of the French revolution. For the French, when revolutionizing weights, measures, coins and dates, and subjecting all to the decimal system of reckoning, were induced, by some unexplained motive, to respect our clocks and watches, and allow dials to remain sexagesimal—that is, Babylonian, each hour consisting of 60 minutes.

The port of Buffalo shipped by lake 2,079,770 tons of coal in 1890, and in 1891 2,365,895 tons, an increase of shipments in this one industry alone of 286,125 tons.

The steel steam yacht Evelyn, built by Piegras for Mr. Hegeman, of New York, will have a Sullivan triple expansion engine and a Roberts Safety Water Tube Boiler.

UNIFORMITY IN NAMES.

Everybody is aware of the rather hit-and-miss way that we have of spelling the names of cities, rivers, and even countries. Each with more or less degree of reason for so doing. To secure uniformity and brevity, a government board was appointed by President Harrison about three years ago, charged with the task of finding out the correct pronunciation of all geographical names, and of fixing upon a standard spelling for them. At the head of the board is Professor T. C. Mendenhall, who is Superintendent of the United States Coast Survey. So far about two thousand changes have been made, most of them in the line of brevity, and all with the endeavor to secure a greater fidelity of the spelling to the correctly spoken name.

Among the most important changes are Bering, for Behring, Chile for Chili, Haiti for Hayti, Colombia for Columbia, (South America) Bermuda for Bermudas, the use of boro for borough in all names ending thus, the dropping of the h from Pittsburgh Edinburgh, and all similar names, the omission of the words "city" and "town" as parts of names wherever practicable, and the contracting of many two-part names into single words.

Of course the authority of this board extends only to the Postal Guide, and all other official publications of the national government, but it is certain to effect, within a few years, desirable changes in the use of the name in newspapers, in books and all other publications.

A GROSS MIS STATEMENT.

A man by the name of C. B. Dudley, who pretends to have some reputation as a chemist, has recently made some analysis of a anti-friction metals, among which is the Magnolia Metal.

There are gross errors in the analysis of Magnolia Metal, and those of other anti-friction metals are incorrect.

If these analysis are instances of his skill as a chemist, it would be well for the public for him to quit the business.

Below is a statement of eminent authority on anti-friction metals bearing out the above statement.

MAGNOLIA ANTI-FRICTION METAL CO.
30 WALL STREET,
NEW YORK, May 1, 1892.

In the analysis of Magnolia Metal Dr. Dudley has overstated one constituent part, and has omitted tin, (which it always contains), and other materials. On the same page is given an analysis of antimonial lead, which may be correct, but not an ounce of this is ever used in Magnolia Metal.

Respectfully Yours, H. G. TORREY.
(U. S. Assayer in U. S. Mint Service, New York.)

THE FINE REMITTED.

The Cleveland Collector of Customs M. B. Gary, this spring imposed a fine of \$500 upon the steam barge Sanilac for leaving that port for Canada last fall without a clearance. This is the penalty prescribed by law for the offense of leaving port without a clearance. Upon representations of the owners that the captain had forgotten to clear until after leaving port, and that after getting outside the weather was such that he did not deem it safe to return, Capt. Gary recommended to the Treasury Department that the fine be remitted. He has received a letter from Secretary Foster authorizing him to remit all of the fine except \$50, and he promptly sent \$450 to Farrasey & Marron, the well-known forwarding agents who are also the agents for the owner of the boat.

It is noteworthy that the Treasury Department frequently ease up after a proper representation is made of the facts in the case, and it would appear that it was the desire of the Department, to enforce the law in these cases without using harsh or arbitrary measures.

A HEAVY JETTISON.

Through the collision of the steamers Russia and Celtic off Rondeau on Lake Erie, during a recent dense fog, the Celtic was sent to the bottom, and the Russia, after jettisoning a lot of valuable cargo was beached, eventually reaching Buffalo where she is now being repaired at a cost of about \$12,000.

The Russia jettisoned about \$42,000 to \$45,000 worth of her cargo, damaged cargo to the amount of \$3,000, and only \$5,000 worth was saved uninjured of her cargo, valued at \$55,000.

The managing owner of the Russia made an attempt to save the flotsam, jetsam and lagan, but as the casualty took place in Canadian waters, he found that in order to get it he must pay 20 per cent duty on the first value of the goods and a further *ad valorem* duty. Before they could be taken care of there was risk of their becoming entirely spoiled, so he left them to the tender mercies of the Canadian authorities. It would be for the best interests of the lake marine if jettisoned cargo was embodied in the rulings of free wrecking privileges.

REPRESENTATIONS were made to S. I. Kimball, Chief of the Life Boat service, whereby that official ordered the removal of the headquarters of the life saving service at Grand Haven to St. Joseph, Mich. The Assistant Secretary of the Treasury has countermanded this order.

A NUMBER of captains have already sent in to the Weather Bureau their morning and evening weather reports for the month of April. In them are found descriptions of many interesting phenomena, and this will doubtless prove the beginning of an extensive lakeweather service.—[Cleveland Leader.]

Notes.

Major Oswald H. Ernst, Corp of Engineers, is detailed as a member of the Lighthouse Board, vice Colonel William P. Craighill, Corp of Engineers, who has been relieved as a member of the Board by order of the Secretary of War.

THE water at the Soo has been improving for two or three weeks. A fourteen foot draft is now allowed to vessels passing through the canal. This improvement is due undoubtedly to the recent heavy rains, and not to anything done by the Lake Carriers' Association investigating committee, which has not yet investigated; and if the water will only come up another six inches as cheerily as the last six has been gained, there won't be much necessity for investigating.

DURING the calendar year 1860, the total arrivals at the port of Chicago by water were 10,507 vessels of all kinds having an aggregate tonnage of 5,138,253 tons; the number of vessels cleared was 10,547, with a tonnage of 5,150,665. During the same year the entrances at New York, from foreign ports alone, were 5,509 vessels, with a tonnage of 6,472,053 tons; the clearances for foreign ports consisted of 5,022 vessels, with a tonnage of 6,145,953. No account is kept of the number of tonnage of vessels plying between New York and other domestic ports, but the above figures show that the business between New York and foreign ports was larger for the year 1890 than that between Chicago and all other ports combined. From the foregoing the contention of arrivals and clearances are borne out with a relative degree to the truth of Chicago having by far the largest number of vessels arriving and clearing, actual tonnage, however, must be conceded to New York. The same distinction exists, or did exist, between the ports of London and Liverpool.

THE TWENTY-FOOT CHANNEL.

The Lake Carriers' Association have taken action in regard to the proposed reduction by the U. S. Senate of the appropriation for the twenty-foot channel, and on Friday last the following memorial was prepared.

To the Honorable, the Senate of the United States.
The Lake Carriers' Association, now including in its membership a great majority of the lake tonnage, respectfully asks your consideration of this communication.

It has been proposed to the Senate by its committee, to reduce from \$500,000 to \$375,000, the appropriation in the river and harbor bill for a ship channel in the shallows of the Great Lakes between Chicago, Duluth and Buffalo. A great gathering of representatives from all the States bordering on the lakes met and memorialized Congress for this appropriation, and for the rapid and active accomplishment of the work. It was their judgment, and it is our opinion that the amount of the original appropriation is quite too small, and that every dollar of it and more can be wisely and profitably expended in the prosecution of the work, beginning just as soon as the appropriation is made available.

We have four thousand miles of coast line; eight of the most important States of the Union border on the lakes; the vessels employed are alone worth \$60,000,000; one-quarter of the entire tonnage of the United States is engaged here; the millions of tons of ore, the flour and grain shipments, and the other products of the Northwest are now brought down and the coal supply is carried on at a cost so low as to be a distinct benefit to the nation. This cost can and will surely be materially reduced when and as a deeper draft can be carried through the present shallow points. We have an abundance of depth throughout the fourteen hundred miles of navigation involved, except in the few places proposed to be improved. This commerce is not the promised after result of having the improved channel, but is a present accomplished fact waiting on the improvement. We are ready today to use the deep channel by loading our present vessels deeper, and such deepening of the shallow places, if it could be accomplished in a day, would that instant increase the carrying capacity of the great lake fleet 25 to 30 per cent, and would at once reduce the cost and the price of transportation besides admitting of the construction of larger vessels in the future.

Further than this the improvement contemplated is a permanent one, and each portion of the work done would be permanent, practically so, since our waters are not subject to great spring freshets or to the filling up or other destructions of submarine work, the waters are clear, with comparatively little sediment or composite, and such work once well done remains as a long and serviceable improvement. We feel justified in claiming that in favor of no other improvement in the list can so much be justly said as of this.

Not seeking to belittle the necessities of other localities or the measure of resulting good from their improvement, we respectfully admit that it is unwise, and both directly and relatively unjust, to the commerce of the Great Lakes, and to those dependent upon it for transportation, to reduce the appropriation. The price of the necessities of life is affected materially by the cost of transportation, and an improvement so immediately and directly affecting this as does the one under discussion, presents a question which rises above any local or partial interest, touching as it does and must, a vital interest of the whole people. Distinctly and emphatically can it be said that this improvement is of national character, of general importance to the country at large, without qualification of local improvement or benefit which so generally is in the necessity of things an element of more or less distinctness and importance in such improvements however much they may benefit and be necessary to the general good.

Such being its undoubted character, the need being so great, the resulting good so certain to follow immediately upon the improvement, we of the lake States and of the Northwest, do confidently hope for an increase in this appropriation at the hands of the Senate, every dollar of which could be put in immediate practical use and could be judiciously expended on the work; and we sincerely hope that on consideration, such a change and increase may result rather than the proposed reduction.

Respectfully submitted,
THE LAKE CARRIERS' ASSOCIATION.
By M. A. Bradley, President, C. H. Keep, Secretary.

The Marine Record.

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ADVERTISING.

Rates given on application.

CLEVELAND, O., MAY 26, 1892.

COMMENT is being made on the state of the harbors along the east shore of Lake Michigan on account of bars forming. If the current trends northerly along the east shore, it is possible that east and west piers form an obstruction to the silt carried in suspension by and with the body of moving water, thereby causing a deposit sufficient to form a bar. In such a case harbor entrances would be better if excavated from the high water mark, in shore, and a breakwater running north and south for weather protection. The main features have no doubt been intelligently dealt with previous to the construction of these piers, yet, it would be of great service to learn why bars should form in open water.

THE City Council of Duluth seem to be somewhat premature in their action authorizing a railroad company to construct a bridge across the entrance to such a highly important harbor, especially as the commerce of the port has increased 50 per cent. in three years. The days are gone by when railroad corporations may "influence" city councils, to the detriment of a vastly increasing and future unlimited commerce, and such trifling matters are now placed in the hands of the Secretary of War, who will no doubt consider the terminal features of the port before allowing an obstruction to choke up the entrance to the western terminal port of lake navigation.

Two important collision cases on Lake Erie within a few days of each other, either argues defective rules for the guidance of steamers under way in a fog, or inattention to the precautions observed by the ordinary practice of navigation. The first collision, off Rondeau, resulted in the total loss of the Dominion steamer Celtic, with one life and her cargo; and, including detention, nearly \$100,000 loss on the one that came out of it best. The second collision, in a fog off Port Burwell, was attended with no loss of life and but little in property, yet, the facts show the same in so far as the collision is concerned, and in point of navigation they show if anything, still worse, because, two steamers collided in open water, and neither ascertained the names, official number or resultant damages to each other, when it was their sworn duty so to do. A former commissioner of navigation asked for an official board of inquiry on these and similar cases, but no steps in this direction have as yet been taken, though it will never be ascertained where the blame rests until such an inquiry is instituted in each case. If there are any means which may be taken to avoid loss of life and property the sooner these means are determined the better, and the burden rests with the Treasury Department until proper action can be taken.

AMERICAN REGISTRY FOR FOREIGN BUILT SHIPS.

Too much care, prudence and scrutiny cannot be exercised in granting American registry to foreign built ships. Already have the Inman Line steamers gained admission through the vote and voice of the nation, but, in that case the line was drawn at 8,000 ton vessels, a high standard of efficiency, and an equal amount of tonnage to be at once contracted for in American shipyards. Taking all in all, it was argued on the principle that "half a loaf was better than no bread," and a compromise on 32,000 tons under the American flag was held out as a national bonanza if only 16,000 tons of it could be ordered for construction by citizens of the United States.

There can be no question but that the Inman deal was a finely engineered scheme to insert the thin end of the free ship wedge, and lake shipbuilders, while admitting that the 8,000 ton limit is practically a safe one at this time, are somewhat dubious of the terms being lived up to in future concessions.

That there is some grounds for the feeling of insecurity in this direction is evidenced by the Austin-Corbin

syndicate seeking American registry for a fleet of foreign built steamers of 7,000 tons and a speed of not less than 19 knots an hour, provided a similar amount of tonnage is contracted for in American shipyards. This follows the former measure, but reduces the efficiency of the tonnage seeking admission under the flag. A still further reduction is made, however, in the case of the steamer China of the Pacific Mail Line. A foreign built steamer of about 5,000 tons is here presented for admission to American registry, her speed efficiency being ignored entirely, although the same principle is made applicable to this registry also,—that is, an equal tonnage to be built by citizens of the United States. Under the rule of repaired tonnage entitled to registry, the following named steamers seek a United States register. Foxhall, S. Oteri, Claribel, Athos and barge Sea Bird.

With the foregoing in view, lake shipbuilders need to scan closely the about 5,000 ton limit, irrespective of speed, as it comes dangerously near to the capacity now being put afloat on the lakes. It is not desirable to have foreign bottoms competing for lake favors, and the coast shipyards have demonstrated their ability to take care of the larger class of ocean tonnage, so that, in this era of shipbuilding, the fewer foreign built ships that are admitted to American registry the more prosperous will our own industry become.

THE LAKE LEVELS.

All interests are now at one in admitting that precipitation alone rules the level of the lakes. The theory of seven year cycles, solar and lunar influences, submarine rivers, etc., seem now to have exploded, owing to the marked raise in the levels occasioned by the recent continual rains.

With the opening of navigation, the Lake Superior trade was somewhat slighted on account of the light draft of water through the St. Mary's Falls Canal, and the lower lake tonnage, at least the heavier portion of it was forced to lose from 15 to 20 per cent of their ordinary carrying capacity, and while hopes were expressed that the steady midsummer rise would in a measure compensate for the lighter draft in the spring, the authority of the corps of engineers in their plans for improving the waterways were questioned by those who had other theories to advance, and believed in only by the vessel owning community.

The gratifying reports from all sections of the lakes relative to the increased depth of water knocks the bottom out of the pessimistic views held by those who maintained that the chain of lakes were gradually though permanently shoaling, and we now hope that the upward tendency which has repeatedly marked the level of the lakes has again set in for a series of years.

HARBOR-MASTERS AT THE WORLD'S FAIR.

The influx of foreign and domestic tonnage, which will undoubtedly put in an appearance at the World's Fair, calls for well-advised measures in the apportioning of anchorages, mooring ground, and similar facilities to accommodate the various types and classes of tonnage so as not to unduly interfere with the ordinary commerce of the port. Neither the "windy city" nor the general shipping interests can afford to make every day a Sunday during the continuance of the Exposition, and it is only in line with the best order of supervision that adequate regulations should be enforced and a proper staff of men engaged to care for the large fleet which will be kept hovering around the entrance to the port.

It may be said that there is ample time for all arrangements to be made in this direction, yet, if a proper system of buoyage, landings and divisions are made it will take considerable time to carry out the work, as for instance, the channel or fairway to the port should be so marked out that no vessels, squadrons, or reviewing fleets would at any time block ingress or egress from or to the port. A limit of anchorage ground might be allotted to steam yachts, another to sail yachts, and commodious landing places arranged for each fleet. There will also be a number of stationary craft, and others requiring a good draft of water in which to anchor, etc., so that a knowledge of the visiting tonnage frequenting the port would be necessary, for the officials to act intelligently in determining suitable locations.

In the event of this policing of anchorages and mooring ground, being neglected, utter confusion, unpleasant experiences, and possibly a loss of life and property is almost certain to ensue, and it is to be hoped that the attention of the officials of the marine division will be directed to this feature so that adequate regulations may be framed before the rush of tonnage sets in.

The arrival of the steamer Wergland this week from Bergen, Norway, at Chicago, with fish and cod liver oil is another indication of trans-atlantic commerce. Although her freight has been expended in transshipping charges, special tonnage may yet be constructed for both lake and ocean service.

FREIGHT SITUATION.

The vessel interests are turned down this week, the tied-up condition of the grain market having its effect in the reduction of ore freights from both Escanaba and Lake Superior. This is only another instance of the wide-spreading effects which gambling on Change has upon the legitimate. Corn is cornered until it has been necessary for some Chicago dealers to secure grain at Buffalo, and pay for carrying it back in order to avoid the payment of extortionate margins. This bubble must burst, however, in a few days, and if the weather clears up large quantities of corn will enter Chicago for shipment. The situation is similar at Duluth, though brought about by different causes. There the heavy exports have reduced the amount in elevators to about 5,000,000 bushels, and this seems such a small amount that elevator men seem to fear a famine, and decline to ship much more at 3½c. At that port shipments will also pick up again when settled weather visits the Northwest. This sudden transfer of boats to the grain trade has been sufficient cause for breaking the rate, but nobody thinks it will go lower. Coal rates have not changed during the week. Rates are as follows: Ore—Ashland to Lake Erie, \$1.15; Escanaba to Lake Erie, 70c. Coal—Lake Erie ports to Chicago, Milwaukee and Green Bay, hard and soft, 50c.; to Escanaba, 40c.; Lake Erie to the head of Lake Superior, hard, 30c., and soft, 45c.; to Lake Huron ports, 40c.; St. Clair river, 35c.; to Toledo and Detroit, 25c.

CONTRACT FOR A LARGE STEEL STEAMER.

The Chicago Ship Building Co. have just secured a contract from John Keldernouse, Thomas Maytham and others of Buffalo, N. Y., for the construction of a large steel steamer to cost \$170,000. It is evident that the Maytham Kelderhouse syndicate are well pleased with the Buffalo built steamers America and Brazil, built at the yards of the Union Dry Dock Co. while Mr. Babcock was superintendent of that yard, and now that he is general manager of the Chicago Ship Building Co. the new work has probably followed him.

The dimensions of the new steamer will be 287 feet keel, 41 feet beam, and 24 feet 6 inches depth of hold. Her engines are to be a triple expansion by Trout, of Buffalo. Cylinders 19, 23 and 52 inches, with 45 inch stroke; two Scotch type boilers, the contract for which has already been signed by the Lake Erie Boiler Works of Buffalo.

The new steamer is to be fitted with all the latest improvements for handling both ship and cargo, and to be completed in October, so that she will probably come in for a share of this season's fall business. Work on her has already commenced, and brisk construction work will go forward until she is finished.

LAUNCH OF THE CHOCTAW.

The freight monitor Choctaw was successfully launched from the yards of the Cleveland Ship Building Co. on Wednesday afternoon, and a large number of sightseers and interested parties were on hand to witness the consigning of the second monitor type steamer to her natural element.

The Choctaw is a sister boat to the Andaste, now on her second trip. Her dimensions are 280 feet over all, 260 feet keel, 48 feet beam, and 23 feet deep. She has a large tumble home on her upper works, and instead of bulwarks she has ridge ropes rove through cast steel stanchions; 7 hatchways, with the afterhouse and small forward house, both of iron, complete the deck fittings. Her sister boat has discharged 2,300 gross tons of ore on a draft of 15 feet. At a distance the monitors resemble the whaleback type of vessel. Capt. Brown, late of the Bradley Line, has been appointed to the command of the Choctaw.

LAUNCH FROM THE YARDS OF THE CHICAGO SHIP BUILDING CO.

The steel steamer Cadillac, sister boat to the Pioneer, recently launched at Detroit for the Cleveland Cliffs Iron Co., was launched from the yards of the Chicago Ship Building Co., at South Chicago, on Tuesday afternoon. She will be ready for service in about two weeks.

The dimensions of the Cadillac are 247 feet over all, 230 feet keel, 37 feet beam, and 19 feet deep. Register tonnage about 1,500 tons; cost, \$115,000. The engines, built by the Cleveland Ship Building Co., are triple expansion; boiler of the Scotch type, 13 by 11½ feet. Captain Wesley Brown will have charge, and Engineer Thomas Kelley will handle her machinery.

LAUNCH OF THE STEEL STEAMER CODORUS.

The following courteous invitation, received at this office, is no doubt extended to all who are interested in the lake marine:

"The Union Dry Dock Company cordially invites you to be present at the launching of the new Steel Steamship 'Codorus,' built by them for the Erie & Western Transportation Company (Anchor Line), at their shipyard, on Ganson Street, Buffalo, N. Y., Saturday, May 28th, 1892, at 3 p. m."

The following dimensions of the Codorus may be placed on record: Length keel, 275 feet; length over all, 290 feet; molded beam, 40 feet; molded depth, 26 feet; displacement at 16 feet draught, 4,340 tons; triple expansion engines, diameter cylinders, 20-33 5/8, stroke 45 inches; two boilers, 12 feet long, 14 feet diameter, for 160 lbs. steam; wheel, 12½ feet pitch.

(Continued from page five.)

The damages to the John M. Nicoll did not amount to more than \$600, but it cost nearly \$3,000 to release her.

The survey on the steamer W. H. Barnum, by Captains Rice and McLeod, resulted in finding damage to the extent of \$9,177.

The harbor tug S. W. Gee, which went to Erie after the big steamer City of Paris, which broke her wheel made the trip up in 5½ hours, and with the steamer in tow came back in 9½ hours. The Gee can run 14 miles an hour, which is pretty fast, considering the shortness of the vessel.

The case of mutiny which Capt. McFee, of the barge Nelson, of the Folsom tow, is the first case ever brought to prosecution under United States law on the lakes. The statute bringing the Great Lakes under United States law was approved Sept. 4, 1890. Before that time it was very hard to punish delinquent fresh water sailors, as now the lakes are a part of the "High Seas." The obstreperous sailor O'Donnell will probably have to "go down" for a while.

Carrying corn from Buffalo to Chicago is somewhat singular, but the steamer Rochester took 27,000 bushels there on account of a corn corner, which made the prices at Chicago pretty stiff. The grain will probably come back here again before long.

A Bauer, of the Rochester's crew, was caught in the hoisting shaft of the boat Sunday last, and so badly injured that he died at the Fitch Hospital next morning.

Capt. Moody, of steamer F & P. M. No. 5, stated to your correspondent that he made no statements charging neglect of signals on the part of the captain of the steamer which was in collision with him recently on Lake Erie. He states that he heard the other steamer's whistles, but the fog was so dense her position could not be ascertained.

The canal rate on wheat to New York broke Tuesday to 2½ cents. Nothing is doing in flaxseed or corn.

Lake coal freights, though not altogether satisfactory, are easy at 50 cents to Chicago and Milwaukee, and while the stock of coal in sight here is not large, grain receipts are not large, and boats wanting cargoes are generally able to get them without breaking the rate. The demand for Lake Superior tonnage has been very light the past week. Considerable coal is moving in the canals to Toledo at 25 cents.

There seems to be no further difficulty about the stage of water in Niagara river and Buffalo harbor. The water was not so high on an average all last season as it has been for a month.

The steamer City of Paris received a new Trout wheel at the Mills dry-dock, and the steamer John B. Lyon took her place on the dock. A survey was held on her Wednesday, but the result is not yet known.

Capt. M. J. Galvin has spent about \$17,000 on the new steam barge J. H. Shrigley, which was badly damaged by fire last fall, and the boat will be out Saturday. She has been entirely recaulked, and new cabin fittings, and given an entire new outfit, with a steel boiler 9x14 feet, and a steeple compound engine, 20 and 40 inches in diameter, and 30 inches stroke. The Shrigley will be about as good as a new boat.

PARKE.

KINGSTON, ONT.

Special Correspondence to The Marine Record.

The government cruiser Constance which passed down the river on Thursday was found to draw a foot too much aft for the canals, and all her stores and twenty tons of coal in sacks had to be moved forward before she could proceed. Capt. George Batter piloted her to Montreal.

John Evans, engineer of the tug Glide, is very ill of typhoid fever at his home in this city.

The government dredge Nipissing is engaged deepening the various city slips.

M. W. Thompson of Belleville has purchased the steamer Swan from Capt. Craig of this city and will use her as an excursion steamer out of Belleville and Bay of Quinte ports.

This spring has been an unusually quiet one in the shipping line at Ottawa, and up to date very few cargoes of lumber have left the Chaudiere docks. Scarcely any American order for lumber has come in as yet and at present there are upwards of forty barges awaiting cargoes with very poor prospects of getting any. The Ottawa forwarders are seriously affected by the situation and the loss is a heavy one for barge owners.

While the Teutonia was unloading her cargo of wheat at Portsmouth, the mate, Henry Olsen, was set on by two of the sailors, Henry Larsen and Moses Hansen, and very badly beaten. At the police court on Saturday the men were charged with the assault and as both were Swedes and unable to speak English, an interpreter was provided by Colonel Twitchell, American Consul, who carefully watched the case. Olsen appeared in court looking as if he had been run through a thrashing machine, but he had neglected to summon any witnesses and the magistrate checked him when he endeavored to lay his own case before the court. The prisoners pleaded not guilty and the evidence was so conflicting that magistrate Duff sent for the master of the Teutonia whom he asked

if his vessel was ready for sea. "Yes," said the captain, "I am going to start for Ashtabula as soon as I can get a tug." "Then," said the magistrate, "I adjourn the case until this afternoon and no bail will be required from the prisoners." All hands left the court satisfied, and the Teutonia left port twenty minutes afterwards.

The steamer Hiram A. Calvin ran ashore at the foot of Casselman's Island on Sunday night and was released by the steamers Alaska and Algonia with very little damage.

What might have been a very serious marine mishap was prevented by the quick judgment and action of the master of the steamer Transit at Morristown on Saturday morning. The Transit is used as a car and passenger ferry between Brockville and Morristown, and while taking on a couple of 25 ton coal cars at the latter place the coupling link broke and the cars ran down hill to the stern of the steamer. As soon as the master of the Transit saw that his vessel was filling aft with water he ran her on shore where she lies bow out and main deck aft under water eight feet. The Donnelly Wrecking Co. had a wrecking outfit at Brockville, where the accident happened, and offered to release the steamer, but the owners sent to Ogdensburg for assistance.

Mr. William Murdock, the engineer in charge of the construction of the government's dry dock has presented Mr. Wilson, the dock master, with a beautiful model of an English cutter, which Mr. Murdock has spent nine months in constructing, and in model and workmanship it is a very fine piece of work, and a credit to the builder. The model is six feet long on a scale of 12 feet to the inch, and the rigging and equipment are as complete as possible. Mr. Murdock will leave town in a few days to be engaged elsewhere on public works, and his many friends regret his departure.

The arbitration between the city of Kingston and the water works contractor is now being conducted by Mr. William Kennedy, of Montreal, who was appointed sole administrator by this doubt.

Capt. Oliver Patenaude, of the wrecked propeller Celtic, was not long in securing a position, as he has been engaged as master of the propeller Enterprise, and left for Sarnia on Saturday to meet the Enterprise and co sort bound from Ashtabula to Heron Bay with coal.

The superstructures on the three platform buoys in our harbor are being literally cut to pieces by small boys with jack knives anxious to carve names for themselves. The harbor-master intends prosecuting a few of them as an example to others.

David Hagerty, an old resident of this city, employed as watchman on the steamer Sparta, was drowned at 2 o'clock Monday morning. The steamer commenced making water through the night and the watchman went up town to inform John Bushell, the mate. On his return he missed his footing and fell over the dock. The hands on the steamer were not aware of the accident until his absence was discovered and his body found floating in the water. He has been for many years watchman on boats in this vicinity, was a widower and leaves a family of five children.

The steamer Glengarry has had pretty tough luck this trip, and to cap all broke her shaft coming down the Welland Canal on Saturday night. The steamer Active has gone from here to tow her and her consorts to this city, where the Glengarry will receive a new shaft.

MAGNET.

A NEW EXCURSION STEAMER.

Special Correspondence to The Marine Record.

TORONTO, ONT.—Capt. Andy Tymon, late manager of the Island Park Ferry Co., is building a new steamer for excursion business between Toronto, Grimsby and other points. Her dimensions are 132 ft. over all, beam 22 ft., depth 10 ft., and will draw 7 ft. Her engine is a steeple compound, built by the Polson Iron Works Co., cylinder, 20 and 12 by 22 stroke, with independent condenser. She will be launched about the 5th June and will be ready for business about July 1st.

Owing to the cold weather, the excursion business on the 24th May (Queen's birthday) was rather lighter than usual.

The steamer Empress of India arrived from Picton last week and has commenced her regular trips between Toronto and Port Dalhousie. Her speed has been considerably increased by the adoption of patent feathering buckets and improvements in her engine.

The new boilers of the Campana have been completed, and on Monday were tested by Messrs. Meneilly & Johnston, Government steamboat inspectors, when everything was found to be in an entirely satisfactory condition. The steamer will be ready to leave about the 30th.

Messrs. Smith & Keighley invited a large number to go for a trip on the Carmona last Saturday, but owing to the disagreeable weather the trip had to be postponed, and will be given on the Campana, also owned by the same firm. The Carmona left for Rochester on Monday, with a large excursion party on board.

A large party left Toronto by special train to witness the launch of the new government cruiser "Curlew," which took place on Monday. As soon as completed she will be taken to the Atlantic coast, to be used in the protection of the fisheries. Work will now be commenced on the third cruiser for Lake service.

The steamer Modjeska, of the Hamilton Steamboat Co., made a special trip on the 24th to carry the 13th Battalion, of

Hamilton, to the city. She will not commence regular trips until about the 10th of June.

SPARTA.

BAY CITY, MICH.

Special Correspondence to The Marine Record.

Capt. W. H. Thorp, of West Bay City, who has been seriously ill, is now in a fair way to recover.

The barge Troy, grounded in Gates slip when only half loaded. The tug Witch of the West released her.

The tug Balize will tow rafts from Georgian Bay to Bay City on a three months contract, commencing June 1st.

The Forbes was out on the marine railway and received a new shoe and stern post. The barge Antelope is at the dry dock to receive a false bottom to fit her for the coal trade.

The fire tug Charles Lee broke her shaft and lost her wheel by coming in contact with some sunken timber near Davidson's yards.

Notwithstanding reports to the contrary Captain Davidson has not yet given any names to the big three, known in the yard as No. 48, 49 and 50.

The propeller Oneida was towed here by the City of London to Davidson's yard, where she will have some minor repairs made. The City of London went on to Duluth for a cargo.

The Bay City Dredging Co. are having two large scows built at the foot of Twenty-third street. They will cost about \$5,000 each.

Captain Lester, of Marine City, has been granted a patent through J. E. Thomas, of this city, for improvements in nautical course indicators. The invention relates to improvements in devices for indicating or determining distances and directions on a chart for enabling a pilot to determine the proper course in which to steer a vessel to reach a desired point. The objects of the invention are to provide an instrument for use in connection with a chart which will enable the master to quickly and accurately ascertain the location of a vessel, and the proper course in which to steer in order to reach his destination. It is accurate and cannot make a mistake.

The thing that has been of most interest to local vessel men recently, has been the cut in the appropriation for the Saginaw River below Bay City. The original appropriation was for \$100,000, \$40,000 of which was to be expended above and the remainder opposite and below here at the mouth of the river where it was most needed. The bill as amended only called for \$75,000, a reduction of \$25,000, and so passed the Senate last Friday. Senator McMillan is said to have discriminated against Bay City in favor of Grand Haven, and the remonstrances and petitions sent from here seem to have been of no effect. Congressman Weadock is doing his best to restore the amount in the House, but may have to accept compromise.

J. P. R.

LAUNCHES OF THE WEEK.

The steel steamer John B. Ketchum was successfully launched from Craig's shipyard, Toledo, O., on Saturday afternoon. She is the first steel boat on the lakes built exclusively for the lumber trade from Lake Superior. Her dimensions are: over all 210 feet, keel 190 feet, and moulded depth 15.

The whaleback steamer Samuel Mather was launched on Saturday afternoon from the yards of the American Steel Barge Co., at West Superior, being the twenty-second of that peculiar style of boats now afloat. The Mather is somewhat larger than the Wilson, which was launched some time ago. She is designed to carry 100,000 bushels of wheat on fourteen feet six inches, and 10,000 bushels additional for every additional foot. She will at once load wheat for Buffalo.

On Wednesday afternoon the steel freight monitor Choc-taw was launched from the yards of the Cleveland Ship Building Co.

The steel steamer Cadillac, built for the Cleveland-Cliffs Iron Co., was launched on Tuesday from the yards of the Chicago Shipbuilding Co.

The Globe Iron Works Co., Cleveland, launch the light-house tender Columbine on Saturday at 3 p. m.

The Union Dry Dock Co., Buffalo, N. Y., launch the Codorus on Saturday at 3 p. m.

The steel steamer Maritana will be ready for launching from the yards of the Chicago Ship Building Co., next week.

COLLISION BETWEEN PASSENGER STEAMERS ON LAKE MICHIGAN.

Owing to a dense fog on Lake Michigan the passenger steamer Kalamazoo, from Holland to Chicago, collided with the steamer Pilgrim, bound to Saugatuck from Chicago.

The Pilgrim proceeded on all well up to midnight on the 24th, when, through some misunderstanding of signals, she ran into the port side of the Kalamazoo, abreast of the forward gangway, and the steamer at once began to fill. The passengers were transferred to the Pilgrim, and an attempt was made to tow the Kalamazoo into shoal water, but she sank eight hours after the collision.

There was no loss of life, and the Pilgrim arrived in Chicago with all of the passengers on Wednesday afternoon. The Kalamazoo was a small passenger steamer of 166 tons, hailing from Saugatuck. She was built in 1888, and had an insurance valuation of \$12,000.

NOTICE TO MARINERS.

Notice is given that the black third-class nunbuoy off Saunders' Point Little Bay de Noc has disappeared, and will be replaced as soon as practicable.

By order of the Light House Board, Commodore Nicol Ludlow, U. S. N., Inspector 9th. Light House District.



THE MARINE RECORD.—OFFICIAL PAPER.

NAVAL VETERAN NOTES.

The general orders from headquarters deals with the subject of more active work among the Naval Veterans, as follows:

Realizing full well that we cannot exist many years more as active associations, it is incumbent on us to encourage and aid the formation of societies of sons and daughters of Naval Veterans, that the history we have made, and pride in their fathers' service may be kept alive to stimulate them to a higher patriotism and appreciation of their country, which alone will guarantee the security of our republic and their homes, when we have passed away.

The recent awakening of our government to the importance of efficient armaments afloat, and the universal favor and pride with which our new guns and ships are received by the people of the country is the commencement of the consummation of what our Association has for years advocated and urged. It is very gratifying also to see the renewed interest in our naval and merchant marine by the formation of Naval Militia and reserve corps. This latter effort is a new field for our usefulness, and it is pleasing to know that many of our numbers are now active in this direction. I desire to impress upon you the duty of contributing your experience and co-operation with all efforts to form these naval reserves, for it is manifest that our chief reliance must be placed upon our naval efficiency in case of foreign complications. It is hoped that some governmental action might also be taken to encourage an active interest in naval matters on our great lakes and inland waters.

It is proposed to have a bureau at the Chicago Fair, to be devoted to Naval matters, and of special interest to the veterans. Further details of the duties of the "World's Columbian Committee of Naval Vets," will be announced as soon as plans can be completed by Chairman Richberg and Comdr. McMahon. Comdr. Francis B. Allen will be designated as "Chief of Staff" and "Mustering Officer," and will have special charge of the organization, or forming of new associations.

On the evening of the 30th ult. a conference was held in New York, with Commo. Saville and Secy. Dorton, of the Maryland Association, when matters were fully discussed pertaining to our next reunion and convention, to be held in Baltimore. The programme as arranged (but subject to modifications) is as follows:

The re-union will be held the week preceding the Twenty-sixth National Encampment of the G. A. R. at Washington, and on Thursday evening there will be a reception, banquet and speaking in some large building or opera house, and invited guests of note will be present, with ladies of the city, and our wives and daughters. Friday—Parade at 10 a. m., in which militia, G. A. R., and sailors and marines will participate; route of march not to exceed two miles; and in the afternoon it is now expected there will be an exhibition of naval manoeuvres by several war vessels, concluding at night with the landing of a storming party by electric lights. Saturday, our Seventh Convention will be in session from 9 a. m. to 2 p. m., and after adjournment an excursion to the National delegates and their ladies will be given. Sunday—Special divine service at some one of the large churches. Monday forenoon—Adjourned meeting of the delegates, and in the afternoon or on Tuesday morning proceed to Washington on special train. Ribbon badges will be furnished in Baltimore by the committee. All Navy veterans of the country are invited to participate in the Baltimore Naval trade, and those not specially taken into the ranks by associations will be formed in a separate division. In view of this grand rally of Naval Veterans, which will be unprecedented in this country, you will see the necessity of bending your energies to recruiting your ranks to include all eligible shipmates in your vicinity, not forgetting in your activity the necessity of making preparations for the trip by the accumulation of a fund for needed expenses. Let your watchword be, "On to Baltimore."

We extend to all the above the cordial welcome of a sailor's fraternal greeting.

Nearly all Naval Veterans are members of the Grand Army of the Republic, therefore bear in mind your various and imperative duties at the coming encampment. It is a matter of grateful satisfaction to observe in our esteemed Commander-in-Chief's general order No. 6, that the Veteran sailor is not forgotten by this distinguished soldier, as the order assigns the National Association of Naval Veterans to a position in the line of the grand parade of the G. A. R. on September 20th, at the 26th National Encampment.

Therefore, the veteran union soldier and the veteran union sailor, the army and the navy, will appear in line of parade in

separate divisions, equally proud to wear the badge of the Grand Army and receive the plaudits of the people as we pass in review in that grand parade.

There is no change in the programme from that announced in general order No. 2, in regard to the Baltimore reunion, except the time, which will now have to conform to that arranged for the Twenty-Sixth G. A. R. Encampment, therefore our first assembling in Baltimore will be on the evening of Thursday, September 15th; but further details will be announced.

The renewed zeal and interest of all the veterans of the war in each other throughout the country is especially noticeable with the Naval Veterans. Reports continually reach me that all the associations are adding to their membership at every meeting. New ones are being formed in several localities, and those which were independent have realized the importance of a closer sympathy and necessity for union of action, and have, therefore, voluntarily allied themselves in a fraternal manner under our national standard of the Union Jack. During the last eighteen months the active associations composing the National have increased in numbers one hundred per cent., and the membership has practically been doubled. Many of our active and retired naval officers of the highest rank are also now being attracted to us by a natural affinity and our growing national importance, and are voluntarily presenting themselves for muster into our ship's crews. They are well pleased at the privilege of meeting on a common level of equality any and all of the old veterans whose faithful and valiant services contributed such great lustre to our naval history, and whose good work aided so materially in preserving this Union of States and its flag in the days of our country's trials and dangers. There is not a ripple of discord on the surface of the water or a cloud to darken the bright sky under which we are sailing in our national co-operation, and your commanding officer is therefore greatly encouraged in his work and well satisfied with the assistance rendered him by our national and association officers and the shipmates in every direction.

WILLIAM S. WELLS,
Rear Admiral Commanding.

Naval Veterans Association of Cleveland, Ohio, meet every other Tuesday evening, commencing May 24th, at 422 Superior street, room 18. A cordial invitation is extended to all Naval Veterans to attend the meetings and renew their acquaintance with shipmates of by-gone years.

OBITUARY.

CAPTAIN ROBERT HAYES.

When off Port Stanley, Lake Erie, last Thursday, Capt. Robert Hayes, of the barge Ogarita, in tow of the steamer Seguin, went forward to attend to some work about the jib-boom when he fell overboard and was lost. Prompt effort was made to save him, and a small boat was over the spot when he sank for the last time. Captain Hayes was well and favorably known to a large circle of vessel men. He formerly lived at Oswego, N. Y., and had sailed the Sassacus, Carthagenian, A. H. Moss, Sunshine, and the Kate Kelly, of which vessel he was part owner. He had been in the Ogarita for some time.

A reward of \$100 is offered for the recovery of the body, which, if picked up by lake seamen, will certainly never be claimed from his grief stricken family. It is requested that when the body is recovered information may be sent to Mrs. Hayes, No. 290 Massachusetts street, Buffalo, or to Connolly Bros., Buffalo. Lake papers will confer a favor on the family by mentioning the above offer. In 1847 Captain Hayes was mate of the brig Andes, and his half century of active life placed him on the list among pioneer lake seamen. We condole with the family on the loss of a good husband, father, and seaman.

GRAIN SHORTAGES.

Some of the grain shortages for which vessel owners have had to go down in their pockets is now accounted for. In the report of the committee appointed by the Minnesota Legislature a year ago to investigate the charges that the elevator companies were guilty of perpetrating gross frauds in the handling of wheat, and combining with the railroads to depress prices, finds that the Lake Superior Elevator Company and the Union Elevator Company, both of Duluth, shipped a large quantity of wheat in an irregular manner. The committee reports: "There is no question but in 1886 and subsequent years the two elevator companies named did ship in round numbers at night and without the knowledge of employees of the State Department 259,000 bushels of wheat. The companies admit having shipped this wheat, but say it was heated in the bins and almost totally ruined."

"It also develops that the warehouse companies gave the elevator companies permission to do this to prevent a panic in the wheat markets of the world. The committee finds that 45,000 bushels of wheat were shipped by these companies without State inspection or weighing as average."

"The companies allege that this wheat was the accumulation of years in the transaction of an extensive business prior to the date of State inspection. It was the duty of the elevator companies to have caused this wheat to be inspected into their houses at the time they began to operate under State supervision."

"It was also proved by sufficient testimony that between the 1st of August, 1885, and the 1st of August, 1890, the companies accumulated a further overage of 11,213 bushels in handling 56,000,000 bushels of wheat. This average was called to the attention of the warehouse commission, which issued an order permitting its shipment without cancellation of outstanding receipts."

The report of the committee is, in effect, that over 315,000 bushels of wheat were shipped from Duluth in an entirely irregular manner, but that nobody in particular is to blame for it, and that the elevator companies shall not be required to make restitution to anybody for the grain so shipped.

SOME OBSERVATIONS ON CURRENTS.

LAKE HURON, May 24.

To the Editor of The Marine Record.

As the question of currents on the Great Lakes has hitherto been held by many experienced seamen as of such variable quantity as not to be considered in shaping courses, I have thought that personal experiences would no doubt help to solve some of the present unexplained strandings, etc. In the first place, I have great confidence in the system of bottle papers now being distributed by the Weather Bureau to ascertain the set and drift of currents, but the daily observations I admit as not clearly understanding their value.

I have from time to time made notes of currents in certain sections of the lakes, and the results have been frequently beneficial, during thick weather especially, as I have been chiefly engaged on sailing vessels, and depending entirely on the winds and weather.

It would appear that the currents, or at least the surface motion is actuated by the prevailing winds, and if we take the formation of Lake Huron we may allow that it is probably more sensitive than any other lake, perhaps excepting Lake Superior, which has some of the gulfs, inlets and bays similar to Lake Huron. I have, therefore, taken Lake Huron as an example for on Point Aux Barques has rested millions of floating property, not counting the many lives that have been lost through the numerous disasters. These disasters have chiefly occurred through some want, the question is what is that want, is it a want of better compasses? Is it a want of a thorough knowledge of the existing temporary or permanent currents? Or is it a want of a better knowledge of correcting and adjusting compasses? These are the questions which ought to be investigated.

Observations which I have been enabled to make from time to time on Lake Huron show that with the wind NE, and just previous to such a change there is a current of from $\frac{1}{2}$ to $\frac{1}{2}$ mile per hour, increasing to one mile, and setting NNE to SSW, and in the vicinity of Thunder Bay, the current seems to set SSW, and as you proceed towards Point Aux Barques it gradually trends more to the westward until it sets straight up Saginaw Bay and branching off in the vicinity of Au Sable and Port Austin Reef, one arm or stream trending towards Georgian Bay, and the other widening out from NE to N. Evidently the set of current most to be guarded against is the set from NE to SW, as it tends to direct a vessel off her course, and places her too far to the westward, which may in a measure account for the strandings on that coast in thick foggy weather.

But, nearly all of the casualties are attributed to compass errors, although the known courses have been steered. Now if the cause is not the fault of the compass there must certainly be some other, and perhaps casualties might be averted if a better knowledge of the action of the currents prevailing, and what causes them, and how to correct the error in courses were thoroughly well known.

In past years, when most of our lake commerce was carried on by sail vessels, hundreds of courses would be steered between Chicago and Buffalo, and each course was projected and sailed as near thereto as possible. To-day nearly all of the immense commerce of these great inland seas is carried on by steam power, and it is more necessary than ever that good, safe, and reliable courses should be made, as time cannot be lost in feeling the way along as sailing vessels used to do. I would suggest that, in crossing Saginaw Bay, with a NE wind and thick, smoky weather, it would be a safe method to allow for at least $\frac{1}{2}$ to 1 mile of a SW set of current, and even if that set is not experienced the vessel is kept off the west shore.

C. W. LOCKWOOD.

OSWEGO ELEVATORS BURNED.

The port of Oswego, N. Y., suffered from a million dollar blaze on Friday last, that has practically destroyed the elevator and milling interests of that formerly thriving Lake Ontario port. The Washington mills and elevator, with a capacity of 300,000 bushels and 500 barrels of flour a day; The Columbia Mills and elevator, capacity 250,000 bushels and 330 barrels a day; The Merchants' elevator, capacity 250,000 bushels; The Marine elevator, capacity 250,000 bushels; The Corn Exchange elevator, and the Continental elevator were all totally destroyed, and the Northern elevator suffered a heavy loss. The only elevator left is the North-Western, owned by Gaylord, Downey & Co. The foregoing, together with the burning of a large quantity of new lumber, is a hard blow for Oswego's industries and the shipping trade of the port.

"Sometime since a superannuated old commodore was placed in charge of one of our navy yards. One day a poor little fellow had just filled his basket with chips as the gouty old commodore 'hove in sight' and growled out, 'Drop that wood, you young rascal; drop it, I say.' A chase ensued. The boy was small and his load heavy, and presently the old commodore, puffing and blowing, seized the boy by the collar. Jumping away and dumping the chips at his feet, the boy exclaimed, 'Take it, you darned old skindint, its the first prize you ever took in your life.'"

The water in the Sturgeon Bay canal is fourteen inches higher than it has been for the last five years.

Maritime Law.

District Court, N. D. Illinois, October 19, 1891.

COLLISION—BETWEEN TOWS.

A steamer, which had just taken on a cargo at a dock in the Chicago river, swung out into the stream for the purpose of starting on her voyage, whereupon two tugs, each towing a canal boat, approached from opposite directions. As soon as she perceived the tugs, the steamer stopped, and swung her bow as far as she could towards the shore, there being another vessel between her and the shore. The two tugs passed each other between the steamer and the opposite shore, and their two tows collided. Held, that the steamer was not in fault, but that both tugs were to blame for attempting to cross at that point, and that each tug should bear half the loss.

District Court, D. South Carolina. February 27, 1892.

GENERAL AVERAGE—JETTISON—EVIDENCE OF EXAGGERATION—STRICT PROOF.

An Italian bark, through collision, sprung a leak, and thereafter jettisoned some of her spare furniture, as well as part of the cargo. On an adjustment in general average, a certain sum was charged against the cargo, and the owners thereof objected that the jettison was unnecessary. This suit was brought to recover the amount charged against the cargo in the adjustment. The evidence indicated that there was great exaggeration, both in the alleged condition of the bark after the accident, and in the number and value of the articles jettisoned. Held, that libellant must make out his case by a preponderance of credible evidence, and, in view of the impression of exaggeration given by the evidence, such articles as were not clearly proved to have been jettisoned, should be excluded from the general average adjustment, the others being allowed.

District Court, E. D., Michigan February 5, 1892.

1. MARITIME LIENS—SUPPLIES—RESIDENT AND NON-RESIDENT OWNERS.

Under the general maritime law, no lien exists for sup-

plies furnished at the port of a state of which the ship owner is a resident, and *quere*, whether the rule is not the same where part of the owners reside in the state in which is situated such port, and others reside in foreign states, the facts being known to the party furnishing the vessel.

2. SAME—CHARTERED VESSEL—RESIDENT CHARTERER—PRESUMPTION.

If a vessel, at the time supplies are furnished her, is in the use, possession, and control of others than the owner, which fact is, or ought to have been known to a party furnishing the supplies, and the person so having the possession of the vessel resides at the port where the supplies are furnished, there exists the same presumption that credit was not given to the vessel, as in cases where the owner resides at such port.

3. SAME—STATUTORY LIENS—HOW ENFORCED IN ADMIRALTY.

It is because the contract for supplies is maritime that an admiralty court has and exercises its jurisdiction in enforcing the lien given by the law of a state for its security, and admiralty courts construe and enforce such lien in harmony with their general principles, and under the same limitations and qualifications as pertain to maritime liens in general.

4. STATUTORY LIENS—NECESSARY PROOF.

A material man, seeking to enforce against a vessel a lien for supplies given by the statute of a state, must establish by proof, as in the case of one furnishing supplies to a foreign vessel, that credit was given to the ship.

5. SAME—CHARTERED VESSEL—ENFORCEMENT OF LIEN EQUITY.

When the circumstances denote that the owner of a vessel is not the party for whose interests the supplies are furnished, and would not be at fault if they were not paid for, it would be inequitable that a merchant should have right to give credit to another, and assert a lien therefor, contrary to the stipulations and interests of the owner.

6. SAME—STATEMENT OF CASE.

The owner of a steam-ship having chartered her to a

company which was a resident of the same town as libellant, the charter expressly stipulating against the creation of any liens on the vessel, and the circumstances indicating that libellant supplied coal to the vessel knowing that she was under charter, and on the credit of the charterers, who subsequently failed, held, that no lien attached to the vessel, either under the general maritime law or the statute law of Michigan.

7. PRACTICE—AMENDING LIBEL.

Held, that the libel in this case, which claimed a lien under the general maritime law, might be amended so as to assert a lien under the law of the state.—[Fed. Rep.]

VITIATING INSURANCE POLICIES.

It is a well founded law and embodied in all marine insurance policies that a vessel must pursue the regular and customary course between two or more ports, as outlined and stipulated when the underwriters took their risk on vessel and cargo, if the vessel should deviate, or from any cause incur an undue risk, the terms of her insurance policy are vitiated and the owners are liable for damages and loss for so doing.

The arrival of the disabled propeller A. L. Hopkins, at Buffalo, last week, has brought this feature more prominently before the lake marine fraternity. The Hopkins broke her shaft on Lake Huron, and was picked up by the Northern Light, and given to the propeller Russell Sage at Bar Point to be towed to Buffalo. The Hopkins had about \$200,000 worth of copper on board, and by passing a port of repairs violated a rule of the underwriters, and the Sage, by towing her to Buffalo, also violated the agreement to carry her own cargo to Buffalo as soon as possible, and without incurring any extra danger voluntarily.

Underwriters doing business on the lakes have in all cases been generally liberal in accepting the terms of settlement thought fair by the owners, yet, where a heavy risk, involving half a million of dollars is concerned, masters and owners require to use caution so as not to vitiate in any way the clauses contained in their insurance policies.

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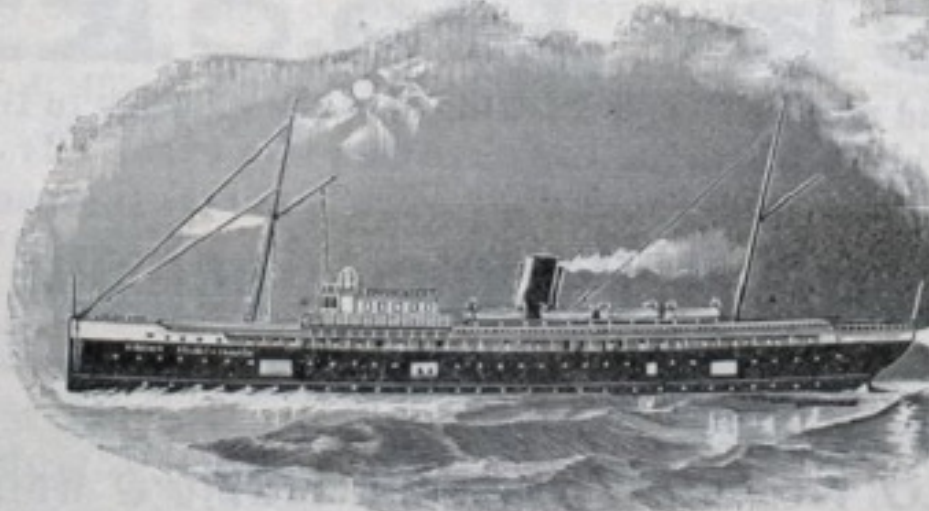
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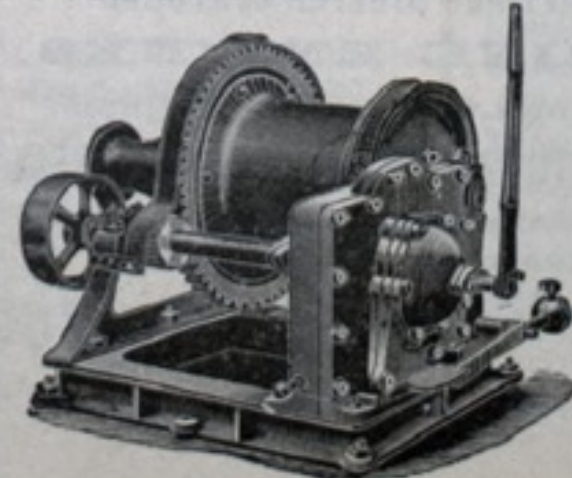
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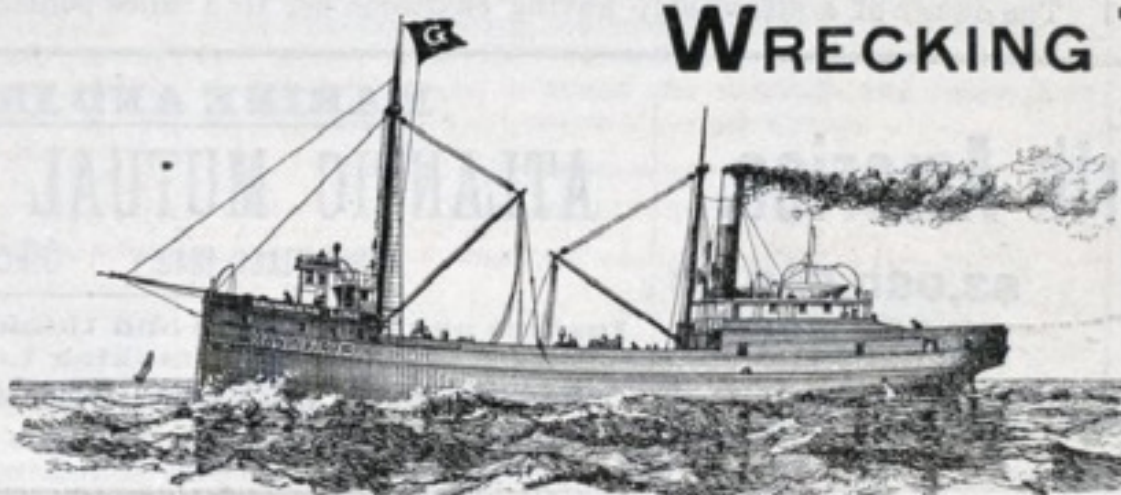
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WHEELER'S IMPROVED
Patent SURFACE CONDENSERS

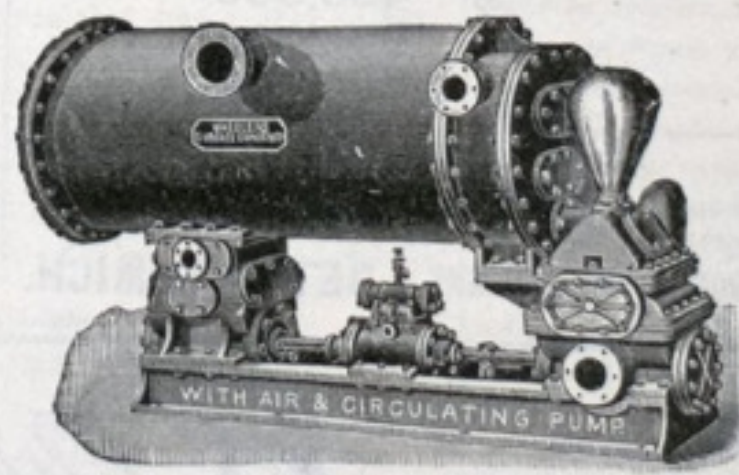
ALSO THE

Wheeler "Admiralty" Condenser,

WITH PATENT SCREW GLANDS,

The Wheeler-Lighthall Condenser

With Patent Waterproof Packing.



LIGHT WEIGHT SURFACE AND JET CONDENSERS, FOR STEAM YACHTS, ETC., A SPECIALTY



Garlock Packings.

Our Elastic Ring, Sectional, Spiral and Special Water Packings are the pioneers in this line. For Steam, Water,
Ammonia, High Speed Work and all places where packings are used they excel. Try our Special water Packing,
fully guaranteed for water end of pumps. See that our trade mark is on each package. Correspondence solicited.

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BUFFALO, N. Y.

MANUFACTURER OF

TRIPLE EXPANSION, THREE CYLINDER, FORE
AND AFT AND STEEPLE COMPOUND

MARINE ENGINES.

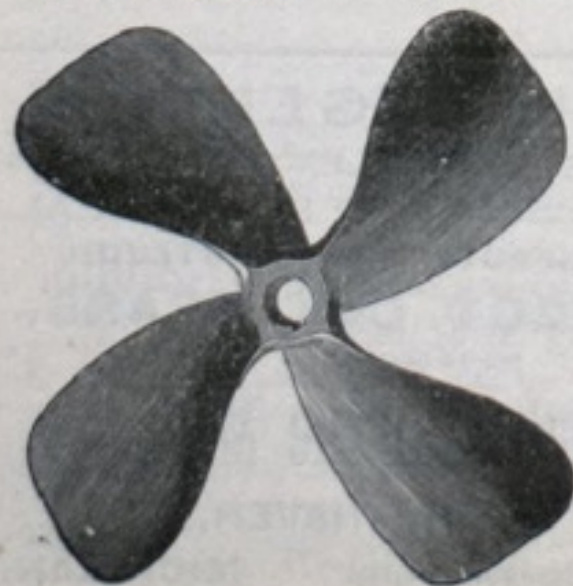
High and Low Pressure Engines.

SECTIONAL TUG & YACHT PROPELLER WHEELS.

Cowles Aluminum and Manganese
Bronze Propeller Wheels.

These Wheels are noted for their extra speed and
towing power, or a proportionate saving of coal.

PRICES QUOTED ON APPLICATION



I. H. OWEN, Prest., Chicago. F. H. VAN CLEVE, Sec'y, Escanaba. Capt. GEO. BARTLEY, Supt., Escanaba.

ESCANABA TOWING & WRECKING COMPANY, Escanaba, Mich.

Tugs, Lighters, Steam Pumps, Hawsers, Hydraulic Jacks & Diving Appliances always ready.

TUG MONARCH.—Engine Compound, Cylinder 16 & 30 in. diameter, 30 in. Stroke, Steam Pressure allowed, 125 lbs.

TUG DELTA.—Cylinder 20 by 23, Steam Pressure allowed, 105 lbs.

TUG OWEN.—Cylinder 20 by 20, Steam Pressure allowed, 104 lbs.

CENTRIFUGAL PUMPS, SEVEN AND FOURTEEN INCH SUCTION

MURRAY & TREGURTHA,

WEST FIRST STREET, FOOT OF E STREET,
SOUTH BOSTON, MASS.

—BUILDERS OF—

HIGH SPEED SINGLE, COMPOUND AND TRIPLE EXPANSION MARINE ENGINES.

TREGURTHA SAFETY YACHT BOILER, the best Yacht Boiler in the market.

SHAFTS, STERN BEARINGS, SMALL STEAM PUMPS.

HIGH SPEED PROPELLER WHEELS A SPECIALTY.